

# **Next-generation performance:**The FRITZ!Box with Wi-Fi 7

The FRITZ!Box 5690 sets new standards for direct fiber optic connections. Equipped with innovative Wi-Fi 7, the FRITZ!Box 5690 enables Wi-FI connection with transmission rates of up to 5760 Mbit/s (5 GHz) and 688 Mbit/s (2.4 GHz). Thanks to advanced technology, even more users can now easily use the home network at the same time. With the integrated 2.5-gigabit WAN/LAN and 2.5-gigabit LAN port, the FRITZ!Box 5690 is also ideal for operation behind a fiber optic modem (ONT).

The FRITZ!Box 5690 offers new smart home features: With integrated DECT ULE features smart home devices can now be seamlessly integrated into the home network. The FRITZ!OS operating system makes it easy to integrate and control these devices. In addition, the highest security standards (WPA3/WPA2) ensure increased protection.

# Product highlights



Maximum speed for GPON and AON connections



Innovative Wi-Fi 7: High-speed Wi-Fi up to 5760 Mbit/s + 688 Mbit/s



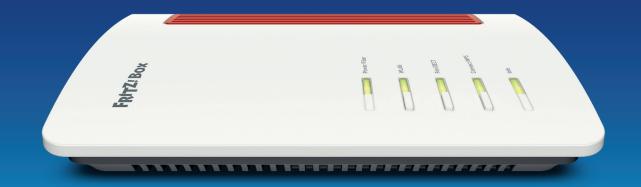
Smart home features for the intelligent home with DECT



Wi-Fi Mesh - Intelligent Wi-Fi system for the home network



FRITZ!OS: Media server, NAS, MyFRITZ!, auto update



# **Technical specifications**

#### **Interfaces**

- Wireless router for fiber optic connections
- Supports a direct connection to fiber optics via GPON (ITU-T G.984) or AON (IEEE 1000BX-10)
- Router can be used with a fiber optic or cable modem, as well as with a mobile network dongle
- 1x 2.5-gigabit WAN/LAN, 1x 2.5-gigabit LAN, 2x gigabit LAN
- Stateful Packet Inspection Firewall with port sharing for secure surfing
- Parental controls with time budget, youth protection module, blocklist and allowlist
- Complete support for IPv6 in the internet, home network and for telephony
- Secure remote access via the internet with VPN
- Security wizard with diagnostic tool and auto updates

#### Wi-Fi

- Wireless access point with Wi-Fi 7 up to 5760 Mbit/s (5 GHz) and 688 Mbit/s (2.4 GHz)
- Extend the home network with Mesh Wi-Fi
- Compatible with IEEE 802.11a/g/n/ac/ax/be
- Wi-Fi network encryption with WPA3/WPA2
- Wi-Fi can be turned on/off by button, connected telephones or schedule
- Supports Multi-Link Operation (MLO) and puncturing
- Wi-Fi guest access secure browsing for guests
- Can be mounted on a wall or table/desk

## WAN/LAN

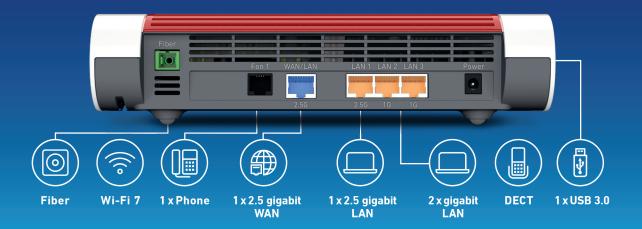
- Internet access via 2.5G Ethernet port; can be used as WAN or LAN port (switchable)
- LAN 1: 2.5 gigabit Ethernet, 10/100/1000BASE-T and 802.3bz-2016 (NBase-T), 2.5 Gbit/s
- LAN 2 + 3: Gigabit Ethernet, 10/100/1000 BASE-T, 1 Gbit/s

# **FRITZ!SFP AON**

- EEE 802.3ah 2004 1000BASE-BX10
- SC/APC
- Wavelength: TX 1310 nm, RX 1490 nm
- Transmitter power: -9 to -3 dBm
- Reception range: -23 to -3 dBm
- Range: 10 km
- Class 1 laser

#### FRITZ!SFP GPON

- Suitable for ITU-T G.984.2/984.5 GPON
- SC/APC
- Wavelength: TX 1310 nm, RX 1490 nm
- Supports rogue ONU detection
- Transmitter power: +0.5 to +5 dBm
- Reception range: -28 to -3 dBm (class B+)
- Class 1 laser



# **Telephony / DECT**

- Telephone system for IP-based connections
- Integrated DECT base station for up to 6 cordless phones
- 5 integrated answering machines featuring voice-to-mail
- Fax function with fax-to-mail
- Internet telephony SIP-compliant (RFC 3261)
- Registration of IP telephones (LAN / SIP-compliant)
- Support for SIPTLS and SRTP
- FRITZ!App Fon for Apple iOS and Google Android

#### **Network**

- TR-069 (TR-069/104/140) support including documentation of the data model in accordance with Broadband Forum TR-106
- TR-369 support for real-time monitoring with multi-controller support including rights management
- Speed test via iPerf and TR-471 (depending on the platform)
- SPI firewall, DoS protection
- IPv6 and IPv4 dual stack including DS Lite with PCP support
- 802.1Q support for WAN connections
- Multiservice (e.g. HSI, VoIP, TR-069, IPTV) WAN connection type with PPPoE, DHCP, static IP, bridging encapsulation
- Public subnet configuration (up to /28) for addressing clients publicly in the LAN
- Exposed Host / Port Forwarding
- VPN support (IPSec and WireGuard), VPN passthrough
- No vendor lock-in. Platform and data remain with ISP (Internet Service Provider)
- ACS-URL via DHCP Option 43, or PPPoE (Zero Touch operation launch)
- IGMP proxy (v3 and backward)
- DNSSec and eDNSO support

#### FRITZ!OS

- FRITZ!Box: a clear, browser-based user interface that's easy to use
- User interface protected by device-unique preconfigured password
- Sensitive user settings protected by 2FA including support for authenticator apps
- Multilingual user interface
- With MyFRITZ!, your FRITZ!Box can be accessed securely from anywhere
- Convenient features such as parental controls, push service, cloud contacts, online storage
- · Wake on LAN over the internet
- Wi-Fi telephone calls in the home network with iPhones and Android smartphones
- FRITZ!Box interface specially designed for smartphones and tablets
- Home network overview, help functions with full-text search and much more
- New features provided in free updates: avm.de/en/fritzos
- Free FRITZ!Apps for telephony, smart home, access to the FRITZ!Box from on the go, and optimizing the Wi-Fi connection

#### **Device Properties**

Dimensions in mm (W  $\times$  H  $\times$  D): 250  $\times$  184  $\times$  69 mm





Direct contacts in Sales, PreSales, and Engineering



In-house hardware and software development in Berlin



Training sessions with FRITZ! staff for engineering and support



Real-time monitoring with the open TR-069 & TR-369 standards



Technical support (also on site) and sales consultation



Regular updates with security as top priority

#### FRITZ!OS

FRITZ!OS is the genius of the FRITZ! family. With this smart operating system, the FRITZ! team opens up a broad spectrum of possibilities in your customers' home networks. Your FRITZ!Box uses the most advanced technologies while providing for the right balance between exciting features and simple operation.

## **Software updates**

FRITZ!OS, our router operating system, is updated regularly to implement new features and to guarantee long product life cycles. And all updates are offered to our customers free of charge.

#### **Device management**

The FRITZ!Box supports not only OMCI management but also offers comprehensive support for TR-069 and USP (TR-369), right out of the box. The use of open standards puts a broad palette of ISP-relevant management parameters at your disposal, no matter which technology you use.

# **Cable Expertise**

With our cable development in Berlin, you benefit from direct access to key project management and development contacts. Many cable features, including packet processing optimizations and energy-saving mechanisms, are in-house developments. The FRITZ!Box 5690 supports basic PacketCable 2.0 functionality along with vendor-specific MIB extensions, ensuring compatibility with diverse network management systems.

#### **Eco design**

FRITZ! products are characterized by low power consumption and configurable energy-saving modes. Production in Europe means short transport routes, secure labor conditions, and the use of environmentally sustainable materials.

Many years of software updates with expanded functions, bug fixes, and security updates ensure long life cycles.

## **Product quality**

Developed and produced in Germany and Europe, our FRITZ!Box fulfills its market promise to its end customers, by ensuring proven reliability with success in the field. Before being launched on the market, the products run through extensive lab phases which offer customers the opportunity to evaluate new features in advance.

#### An all-in-one device

A FRITZ!Box is a joint router, installed directly at the internet connection. This saves power, while ensuring convenient operation and simplifying device management. Internet, Wi-Fi, streaming, telephony, smart home, and much more – combined in a single device.